



NIOSH HEALTH HAZARD EVALUATION REPORT:

HETA # 2001-0139-2930

**Alameda County Public Authority for In-Home
Support Services
Alameda, California**

February 2004

**DEPARTMENT OF HEALTH AND HUMAN SERVICES
Centers for Disease Control and Prevention
National Institute for Occupational Safety and Health**



PREFACE

The Hazard Evaluation and Technical Assistance Branch (HETAB) of the National Institute for Occupational Safety and Health (NIOSH) conducts field investigations of possible health hazards in the workplace. These investigations are conducted under the authority of Section 20(a)(6) of the Occupational Safety and Health (OSHA) Act of 1970, 29 U.S.C. 669(a)(6) which authorizes the Secretary of Health and Human Services, following a written request from any employers or authorized representative of employees, to determine whether any substance normally found in the place of employment has potentially toxic effects in such concentrations as used or found.

HETAB also provides, upon request, technical and consultative assistance to federal, state, and local agencies; labor; industry; and other groups or individuals to control occupational health hazards and to prevent related trauma and disease. Mention of company names or products does not constitute endorsement by NIOSH.

ACKNOWLEDGMENTS AND AVAILABILITY OF REPORT

This report was prepared by Sherry Baron and Daniel Habes, HETAB, Division of Surveillance, Hazard Evaluations and Field Studies (DSHEFS). Field assistance was provided by Laura Stock and other members of the University of California at Berkeley Labor Occupational Health Program (LOHP). Desktop publishing was performed by Robin Smith. Review and preparation for printing were performed by Penny Arthur.

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Highlights of the NIOSH Health Hazard Evaluation

Evaluation of Home Care Workers in Alameda County

NIOSH was asked by the Alameda County Public Authority for In-Home Supportive Services and the Service Employees International Union local 616 to evaluate working conditions and make recommendations regarding the prevention of musculoskeletal disorders and other safety and health problems among homecare workers (HCWs) in Alameda County, California.

What NIOSH Did

- We talked to workers to find out what causes their aches and pains.
- We visited the home of one consumer receiving home care.
- We talked to county agencies and community groups to find out how to make home care work safer.

What NIOSH Found

- HCWs cannot provide for their health and safety alone.
- Poor communication between HCWs and consumers makes home care work more dangerous.
- HCWs need training and equipment to do their jobs safely and well.
- Cleaning, cooking, and bathing tasks cause as much worker strain as lifting and moving consumers.

What Alameda County Managers Can Do

- See to it that workers are trained and know job responsibilities.
- Help workers get the tools and equipment they need to work safely.
- Make sure workers know what to do if they get injured on the job.

What the Alameda County Employees Can Do

- Report unsafe workers conditions to the consumer and social worker.
- Make sure they discuss with the consumer the tasks that need to be done and agree on how and when these tasks should be done.
- Talk to the consumer if something is wrong to make things better.
- Take all the training that is offered to them.



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**Health Hazard Evaluation Report 2001-0139-2930
Alameda County Public Authority for In-Home
Support Services
February 2004**

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SUMMARY

On January 19, 2001, the National Institute for Occupational Safety and Health (NIOSH) received a request from the Alameda County Public Authority (PA) for In-Home Supportive Services and the Service Employees International Union (SEIU) local 616 to evaluate working conditions and make recommendations regarding the prevention of musculoskeletal disorders and other safety and health problems among the approximately 10,000 publicly funded homecare workers (HCWs) in Alameda County, California who are represented by SEIU. Alameda County, like all of the California In-Home Supportive Services (IHSS) HCW, uses a consumer directed model in which the recipient of the home care services recruits, hires, trains, directs, and fires their own workers. Because of the unique nature of a consumer directed service model, the PA and SEIU asked NIOSH to evaluate the health and safety issues of HCWs in Alameda County.

The evaluation utilized multilingual HCW focus groups, key informant interviews, analysis of injury data and an in-home site visit. Findings indicated that housekeeping tasks were as physically demanding to workers as client lifting and transfer tasks, that workers largely did not have adequate tools and equipment to complete their required tasks, and that most consumers' homes were not equipped and/or configured to allow for efficient delivery of needed services. The evaluation also found that most HCWs had little or no formal training on how to safely perform home care tasks prior to beginning work and few opportunities existed for in-service training during employment.

Interviews with individuals and groups involved with homecare in the Alameda County area, consumers, consumer groups, and IHSS social workers indicated that there were additional problems with the consumer-client relationship, such as the lack of a clear understanding of whose responsibility it was to provide for the safety and health of the HCW, and lack of a clear definition of what a HCW was required to do for their consumer. In general, it was found that there was poor communication between consumers and HCWs, and inadequate means for resolving disputes that arose.

Recommendations were made for the establishment of a comprehensive safety and health program that could be overseen by a union and management joint committee.

NIOSH investigators conclude that the current program for delivering consumer-directed home care services in Alameda County could lead to health and safety problems for homecare workers. Lack of training, inadequate resources, and poor communication between consumers and caregivers contributes to health risks. Recommendations to improve safety and health for home care workers are contained in this report.

Keywords: SIC 8082 (Home Health Care Services), ergonomics, musculoskeletal disorders, housekeeping tasks, focus groups, community health organizations, consumer-directed home care.

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INTRODUCTION

In January 2001, the National Institute for Occupational Safety and Health (NIOSH) was asked by the Alameda County Public Authority (PA) for In-Home Supportive Services and the Service Employees International Union (SEIU) local 616 to evaluate working conditions and make recommendations regarding the prevention of musculoskeletal disorders and other safety and health problems among the approximately 10,000 homecare workers (HCWs) in Alameda County, California. This report includes the results of this evaluation, as well as recommendations for improvement of the safety and health of these workers.

BACKGROUND

HCWs who provide housekeeping and routine personal care services to elderly, disabled, or ill individuals are one of the fastest growing health care occupational groups. It is also one of the groups with the highest occupational injury rate. In 1997, the U.S. Bureau of Labor Statistics issued a special report on work-related injuries to HCWs showing an injury rate which was 50% higher than that of workers employed in the private hospital sector and 70% higher than the overall rate for all private industry workers. Moreover, the rate of overexertion injuries (which includes musculoskeletal disorders) in HCWs compared to private hospital and private industry workers was 27% and 141% higher, respectively.¹

While homecare services most commonly are provided through private agencies, there is increasing interest in independent provider or consumer-directed models for provision of services. Under this model the consumers of services are responsible for recruiting, hiring, training, directing, and firing their workers. This model initially gained support among younger and disabled recipients of services but has increasingly been advocated as a model for the elderly as well.² Although at least seven states have adopted some component of the consumer-directed model for their publicly funded

homecare service programs, the state with the most extensive program is California, which employs over 200,000 HCWs through the state-wide In-Home Supportive Services (IHSS) program.

Evaluations of the efficacy of the consumer-directed model have found that the ability of the consumer to choose and direct the worker appears to improve the bond between the consumer and the HCW and may result in lower turnover and better quality of care. However, concern has also been raised about the adequacy of training and safety and health protections for the workers since consumers may be limited in their ability to provide safety training. Consumers' low income status limits resources to provide appropriate tools or equipment that might improve the safety of the work environment.

Alameda County IHSS HCW Workforce

A telephone survey of 500 randomly selected Alameda County IHSS homecare workers conducted in the fall of 2001 by the Center for Labor Research and Education at the University of California Berkeley and the East Bay Alliance for a Sustainable Economy showed the following important demographic characteristics:³

- 75% were persons of color (Black 43%, Asian 25%, Latino 7%).
- 52% provide services to a family member and another 19% live in the home of the IHSS client but are not related.
- Most homecare workers are over 40 years old (28% 55 or older, 37% 41-54).
- 80% are female.

EVALUATION METHODS

NIOSH faced several challenges in this evaluation, the most important of which was the infeasibility of conducting workplace assessments when the workers are dispersed throughout thousands of private homes. In order

to understand the constraints to the provision of health and safety programs for this kind of work, it was necessary to consider the perspectives of a variety of stakeholders. These were the PA, as the official employer; the IHSS staff who are responsible for approving HCW services; the homecare service consumers, who were ultimately responsible for hiring and defining the HCWs' work tasks; and the variety of public and community based service and advocacy organizations that assist those who qualify for IHSS homecare services. Therefore, the evaluation included the following components:

- Informational interviews with union members and staff, PA staff, IHSS staff, and various governmental and non-governmental agencies and organizations involved in the coordination of homecare services to Alameda County residents.
- Structured focus groups with Alameda County homecare workers conducted in the major languages of the workers: English, Spanish and Cantonese.
- Analysis of the IHSS database, called Case Management Information and Payrolling System (CMIPS), that contains information on the number of IHSS recipients, their level of disability and the types and hours of home care services authorized by IHSS.
- Analysis of the workers compensation data collected by IHSS for one year.
- Ergonomic evaluation in one consumer's home.
- Development and pilot testing of training programs for HCWs based upon information gathered through this evaluation.

NIOSH contracted with a local labor education program, the Labor Occupational Health Program (LOHP) of the University of California, Berkeley, to assist with several aspects of the project, particularly the development of the focus groups and the pilot training programs.

RESULTS

Interviews

During the course of the evaluation, we identified several key organizations involved with homecare in the Alameda County area, as well as consumer groups and IHSS agency officials. We contacted these agencies and organizations and requested an interview with a representative who could inform us about that agency or organization's views regarding issues related to the NIOSH evaluation. The goals of these meetings were (1) to better understand the organization and functioning of the IHSS program and the PA of Alameda County and (2) to better understand the needs and concerns of the group representing or serving the consumers who utilize the IHSS services.

IHSS and Alameda PA

A brief presentation was made at one of the advisory board meetings for the PA regarding the NIOSH evaluation. The board, which included a number of consumers, provided some interesting insights into the consumers' concerns, including the importance of consumers having the flexibility to direct their home care workers to provide services in a manner that fits the individual consumer's needs. This would include having the right to train their home care workers to provide services in the manner they liked them to be done. This group expressed understandable concerns about their own safety and comfort when discussion of mechanical devices such as hoist lifts and mechanical beds was introduced. However, there was agreement that if a homecare worker gets hurt while attending to the needs of a consumer, both the HCW and the consumer suffer. Overall, the PA Advisory Board was supportive of the NIOSH evaluation and was interested in improving safety and health conditions for both the consumers and workers.

A meeting with a supervisory intake social worker at IHSS provided information on how an eligible individual enters the system, and how homecare needs and hours are determined. Once a consumer is eligible for services, the intake

social worker makes a home visit to determine the consumer's capabilities and needs. There are IHSS guidelines for how much time is allocated for laundry, domestic services, errands, and shopping, regardless of the specific circumstances of the consumer. For other tasks the social worker has discretion to assign hours depending on the consumer's need. The services and associated hours that the social worker determines for the consumer are logged into an internal form that does not have to be shared with the HCW. The social worker felt that the consumer should control his or her own care and should have the flexibility to determine which activities and for how long the HCW spends on each. It was also her view that if the social worker determines that a consumer needs a specific piece of equipment such as a mechanical lift or other assist device, it can be prescribed at the time of the assessment and obtained by working with the consumer's doctor and Medicare.

A meeting was held at the Alameda County PA with a group of the IHSS district social workers. This group performs follow up services and home visits to consumers who have already been approved for social services by the IHSS intake social workers. Because each caseworker has about 400 cases, the emphasis during yearly home visits is more on the needs of the consumer than on those of the HCW. While some of the social workers felt comfortable in identifying a need for common items like shower chairs and hand rails in the bathroom, they did not feel they had the time or the training to prescribe aids for lifting and transferring consumers. Training in giving injections, lifting, and performing "patient" transfer tasks were mentioned by the group as most needed by the HCWs. Some of the social workers felt that IHSS was more effective in meeting the needs of the consumers when there was a physical therapist on staff, but current high case loads have eliminated the therapist from the IHSS staff. Other concerns raised by the social workers were the high turnover rate of HCWs and how that might complicate the provision of regular training programs.

A meeting with the Executive Director of the PA of Alameda County reinforced many of the ideas and opinions we had heard from others. He mentioned that a big area of concern for HCWs in Alameda County was the disparity between what services they provide for their consumers versus what the consumer has been approved for by the intake social worker. He thought this disparity was even greater in the Spanish and Cantonese communities in the county. He suggested there be a contract between the consumer and the HCW, but noted that many consumers would take issue with this proposal. He felt that if training is to be provided, HCWs would need to be paid for the time, in order to expect a good participation. Otherwise, those who may need the training the most would be unlikely to attend. His final comment was that any change in policies regarding the IHSS homecare program that required additional funds would need to be approved by the Alameda County Board of Supervisors. As such, he felt that the more specific any proposal was, the more likely it would receive their support.

Community-Based Organizations and Service Providers

The Center for Independent Living (CIL) is a community-based organization that assists disabled persons in a variety of ways including finding employment and housing, and providing personal assistant (home care) services. CIL also runs one of the official registries of HCWs for IHSS. CIL works with a range of IHSS consumer needs including referral for a good HCW, assistance in learning how to choose a HCW, and assistance for the newly disabled who are unfamiliar with the entire process. The CIL representative felt that many consumers were not prepared to be employers and therefore supports the use of job agreements and written work schedules to avoid conflicts between consumers and workers. CIL recommended that IHSS and the PA continue to solicit consumer input as the best means of providing good service. CIL also recommended that workers and consumers receive training together so that each is aware of the others' needs and responsibilities, while clearly

communicating that the consumer is in control of how the care is provided.

Linkages is a program of the City of Oakland's Department of Aging and Adult Services, which provides case management services to low income residents with the goal of preventing the premature or inappropriate institutionalization of aging or functionally impaired adults who are not eligible for other services. In addition to transportation, meals, and in-home support services, Linkages provides assistance in obtaining assistive devices, medical equipment, and communication devices that enable recipients to function independently at home. A consumer receiving home care from IHSS can be eligible for Linkages services, but there is a long waiting list due to budget limitations. The Linkages representative commented that the households of IHSS consumers are often not equipped with devices such as hand rails, bathtub grab bars, and raised toilet seats, that would make a typical HCW better able to do their job safely. He also mentioned that some problems they see in the home like cluttered rooms, wires on the floor, and loose throw rugs that can endanger a consumer and a HCW, could be identified and remedied at the time of the initial IHSS intake social worker home assessment. A final comment by the Linkages representative was that this was the first time he had ever discussed the health and safety of the HCW in the context of the services that Linkages provides.

We met with Easy Does It, a city-financed organization which provides emergency homecare services to disabled individuals in Berkeley, California. Their services range from fixing wheel chairs when repair establishments are closed to providing professional home care assistance to consumers who have lost attendant care due to unforeseen circumstances. Easy Does It believes that training is important, but that it must be customized to the individual needs of the consumer. They believe that consumers should be allowed to make their own decisions regarding the conduct of their care, but that they need to be educated in how to make good decisions. The representative likewise emphasized the importance of training

for HCWs so that they can properly assess whether they have the skills and ability to meet the needs of a particular consumer. It was also emphasized that while consumers need to be in control, they need to be flexible or they will have difficulty obtaining and keeping good HCWs. Easy Does It sometimes acts as a mediator in disputes between consumers and HCWs and tries to train them to avoid such conflicts.

We interviewed representatives from The World Institute on Disability (WID), a national nonprofit research, policy, and advocacy organization for people with disabilities, about the needs of consumers receiving home care services. They were in agreement with the general theme that most consumers have never been employers before and need guidance in that area, but also emphasized that disabled people want flexibility and control of what takes place in their home. They also agreed that training for both consumers and HCWs was needed and it was especially important for consumers because they have a stake in the health and safety of home care providers.

We met with an education specialist who was developing a safety and health curriculum for another SEIU local (local 250) which represents IHSS HCWs in San Francisco. This curriculum covers information regarding identification and prevention of biological, physical, and chemical hazards that are associated with housekeeping tasks and how to perform housekeeping duties in an ergonomically correct way to avoid injury. At the time of our meeting, the program was in its early stages and had not been used in a training session. The curriculum is now refined, has been translated into Spanish, Chinese, and Russian, and is available on the SEIU web page.⁵

Finally, we met with two representatives of RTZ Associates which is a private consulting company that provides information technology assistance to organizations providing home care services. The two RTZ researchers were in the process of administering a survey to evaluate the economic status and other job related factors of HCWs in Alameda County. Both researchers have conducted a variety of studies evaluating

how home care services can best be provided and felt that HCWs need more education, more pay and benefits, more training, and more case management services. They felt that a primary goal should be to keep HCWs in the work force by improving work conditions and providing some services that can be accessed if a worker encounters difficulty in delivering the home care the consumer depends upon.

Focus Groups

In the winter of 2002, four focus groups of Alameda County IHSS HCWs were conducted. Two of these focus groups were held in English, one in Spanish, and one in Cantonese. The focus group format was developed through discussions by NIOSH, SEIU, the PA, and LOHP. The major emphasis of the groups was on the physical stresses of the work, although other health and safety concerns could have been raised, especially during the general discussion on training needs. LOHP took final responsibility for the script of the focus group and facilitated the English and Spanish groups. The Chinese group was facilitated by an independent contractor. The format combined traditional open-ended focus group discussion with more structured small group activities used in training programs, such as developing and prioritizing lists of physically demanding work tasks. The focus group members were recruited by SEIU from their general membership and while in each group there were some participants who are active in the union, the majority had not previously participated actively in union programs. In all four groups, a total of 35 HCWs participated, 4 of whom were male. Three of the groups had 9 to 12 participants and one of the English groups had only 4 participants. While some participants had worked for more than 10 years in homecare, others had been working only a few months. Only three of the participants cared for a member of their immediate family. NIOSH investigators observed the English and Spanish groups but not the Cantonese. Each focus group session was audiotaped and a written transcript of those tapes was reviewed in order to develop this summary.

The first segment of the focus groups discussed ways in which homecare workers were informed by consumers about the tasks they would be doing and how those tasks should be done. The two themes raised by workers in all four groups were (1) difficulties in clearly defining the expectations and a reasonable list of job tasks that could be completed in the allotted time, and (2) having the appropriate tools and equipment to do the work.

In all of the focus groups, HCWs described many problems in developing a clear, well-defined and reasonable list of their job tasks. Most stated that they never were shown the official task list and time allocations developed by the intake social worker. Some workers felt abused because they were expected to do chores that were not part of homecare work, such as cleaning the bird cage or doing yard work. Some reported that at the interview one set of tasks was discussed; but, once they started working, the consumers would add more and different tasks. They expressed a feeling of never being able to rest, such that if they finished a task and wanted to take a break before starting the next task, the consumer interpreted that as slacking off and would add additional tasks. Some felt that others in the household expected them to do work for them, such as cooking meals for the whole family.

The more the worker felt that she/he had a clear set of activities and expectations, the greater was the satisfaction with the arrangement. For example, some workers explained that during the interview they discussed the types of activities expected of them and then created a list and schedule of tasks for each day. One of the Chinese workers thought that the lack of clear definition of duties was unique to Chinese consumers and that “western” homes were more organized with a list of specific tasks for the workers to complete. However, based on discussions with the other groups this did not appear to be unique to any particular cultural group. Not surprisingly, HCWs assisting their own family members tended to have fewer of these types of concerns. However, they did share the sentiment expressed by others of sometimes

feeling that their consumer (especially the elderly) could be overly demanding.

Another concern raised by workers from all of the groups was the challenge of accomplishing the tasks when the consumers either did not have appropriate equipment available or when the consumer had strong views about how to accomplish tasks (particularly housekeeping tasks) in a more physically stressful manner than would be generally recommended. One worker stated the following:

Well, I had this last lady. She was very, something else, but she wanted her floors mopped and waxed and she had me with this raggy old mop, you know, and everything was scattered all over so I organized the cleaning so I know what to do. She didn't have rags or anything like that so of course I brought some. Cause I hate to do a job half way. And I did it the best way I could, but I suggested to her wouldn't it be better to get a, you know, a different kind of a mop. And then she wanted me on my hands and knees. Swirling.

During the next portion of the focus groups, the HCWs were instructed to place either blue dots (signifying pain) or red dots (signifying lots of pain) on a diagram of the body to indicate the areas of the body where they felt pain or discomfort at the end of a typical workday. Figure 1 shows the four body diagrams with the dots. Although the number of dots per diagram varied based on the number of participants, the location of the dots were very similar, with concentrations around the back, neck and shoulders, and lower extremities. Participants were also asked to quantify the severity of their pain using either a numeric scale or a pictograph scale as shown in Figure 2. We used both the scales because, in addition to obtaining information about the severity of the pain, we were also interested in determining whether participants found the numeric or the pictograph scale more meaningful, and if this varied among the different cultural/linguistic groups. However, in all four groups about half the workers chose the numeric scale and half the pictograph scale and overall the average severity of pain was rated in the mid upper half of both scales (7.5

out of 10 on the numeric scale and the 4th of the 5 faces on the pictograph scale).

Workers were then asked as a group to list the tasks that led to the pain and once the group's list was developed, each worker was allowed four votes (using dots) to designate the most important tasks that caused her/his pain. They could use all four votes for one task or one vote on four different tasks or any combination between.

Appendix 1 shows the complete list of tasks and the votes for the four groups. Table 1 shows the tasks most commonly prioritized by all four groups.

The groups then were asked to generate a list of solutions that they felt would make those tasks less stressful. Types of assist devices that workers described were gait belts, shower chairs, walkers, and triangular supports hung from the ceiling to help a person lift themselves up in bed. A minority of HCWs were familiar with any of these assist devices or how a consumer would be able to obtain these or other similar devices.

HCWs were asked if they had sustained a work-related injury and if they knew about the existence of workers' compensation. Very few workers reported any injury. One worker, while repairing a sink with a screw driver, cut her hand and required stitches. At the time she was working at a community center and her care was paid for by the center. In another group, one worker had fallen and eventually went on disability. Three months after her fall, in the process of applying for disability, she was told that she should have filed a workers' compensation claim. In all four groups, the vast majority of workers were not aware of their rights under workers' compensation and were very eager to obtain the materials that the LOHP facilitators had brought. Some focus group members had participated in a workshop sponsored by the union on workers' compensation. In the Chinese group there was much discussion on the use of self treatment with herbal oils and in the Spanish group of going to community "healers." In most cases

HCWs paid for treatment out of their own pocket. In some groups there was mention of having used the newly established health care benefits to see a medical person for musculoskeletal pain. Many said that they could not afford to miss work both because they would not be paid and because the consumers would not have anyone to take care of them. In the words of one worker:

My experience is that every one can afford to get sick, but not us. We don't have sick leave, unless you cannot get out of your bed, or else, you still have to go to work.

The final section of the focus groups concentrated on potential solutions to prevent the problems they experienced. The discussions covered three major types of solutions: (1) improved communication with the consumer and social worker, including a clearer definition of job tasks, (2) more mechanical assist devices to help with consumer care, and (3) better equipment to facilitate housekeeping tasks.

Participants in all of the groups emphasized the importance of better communication including: (1) having information about the health condition of the consumer, (2) agreeing on a well defined list of work tasks (some mentioned a contract), and (3) the ability to request and obtain appropriate equipment and housekeeping tools. Workers realized that sometimes consumers could not afford the equipment, but in other cases the consumer refused to use available assist devices or to purchase, even relatively inexpensive, housekeeping tools. Several workers reported bringing their own carts or mops or sometimes pressuring other family members, such as the children, to purchase items.

Regarding assist devices, a few workers were familiar with gait belts, had used draw sheets, shower chairs, and metal triangles above the beds that allowed consumers to lift themselves, and a few had used a mechanical lift device (such as a hoist lift). However, the majority of workers in all of the groups were unaware of even the most basic devices such as gait belts, transfer boards, and shower chairs. When the

facilitators shared pictures from assist device catalogs there was much interest in obtaining more information. Although the workers commented that it can be difficult to obtain financial assistance to purchase assist devices, they were still interested in knowing what was available. Workers also felt that consumers were not always aware that they could obtain better equipment such as a hospital bed or a motorized wheel chair by requesting a prescription from the doctor. They also expressed concern that they did not have routine access to gloves or other equipment that might protect them against infectious diseases. Finally, the workers had many low cost ideas about improving housekeeping tasks including having appropriate cleaning agents, mops, long-handled cleaning brushes, coasters to allow furniture to move more easily, and rolling carts for carrying groceries or laundry.

Each group briefly discussed some of the major barriers that impede implementation of solutions. One major barrier was difficulty in finding out how to obtain assist devices. Another barrier was the expense of these devices, especially for low income consumers. One worker, who was trying to find out how to have a bathroom grab bar installed, explained the difficulties in finding ways to obtain equipment:

We started at the library and at the social security office and were asking people - who do we contact? And they gave us a few numbers but each number led to a bunch of other numbers and then we just got frustrated.

However, other HCWs shared examples of how they were able, because of their familiarity with assist devices they had used in other homes, to instruct the consumer of exactly what to ask from the doctor.

The most commonly discussed barrier was difficulty in communicating with the consumers about the needs of the HCW and establishing a clear and reasonable set of expectations to develop a productive working relationship. One worker expressed the frustration that often occurs in working with elderly consumers who do not want to admit to their level of disability:

I asked mine to get a wheelchair and his reply was - he wasn't dead yet. And he really needed one, cause he was always wanting to go out to the park or somewhere. And he had his walker but he just won't get a wheelchair.

Others discussed the frustration of not being able to establish a clear list of job tasks and therefore never being sure of what or how much would be asked of them. Although they knew that the social workers provided the consumers a list of the tasks the HCWs should and should not be asked to perform, they felt that some consumers keep this information from them:

I have found that when they do get approval (for home care services) that they also get a list of what we're supposed to do and what we're not supposed to do, but they're trying us on what we will do. Some of us aren't told what we're supposed to do, exactly what we're supposed to do.

Finally, others expressed frustration regarding consumers not providing them with the basic housekeeping tools and materials which would allow them to accomplish those tasks safely and efficiently:

... Oh, the chemicals that can be used, they don't give you that, the elderly won't buy those chemicals for you, they just ask you to use some of the cleaning powder (laundry agent) to wash, ask you to scrub harder until it is clean. Yes, those different kinds of chemical cleaning agents for various types of cleaning purpose. They won't buy them for you, they only give you one type of cleaning agent, you use it for all purposes.

The focus groups concluded with a brief discussion of the types of safety and health training the HCWs thought were needed to accomplish their work. Several focus group members mentioned participation in courses run by the union or the PA on safe lifting techniques, chemical safety, blood borne pathogens, and cardio-pulmonary resuscitation (CPR). All thought that these courses were very good and should be expanded. Groups also expressed interest in courses on how to use

and obtain assist devices and on workers' compensation. Workers felt that it would be best if they could be paid to attend the courses, but, if not, there would still be a lot of interest. They also thought that courses are most successful when they are provided in an accessible facility located in the community, such as at the union office or at one of the senior housing complexes where many of them work.

In addition to specific training topics, such as lifting, universal precautions, and CPR, participants expressed interest in courses that discussed some of the major health problems of consumers and specific issues that HCWs need to know to provide assistance to them. Several workers expressed frustration that often HCWs will be asked to take care of someone who has particular needs yet they are completely unprepared. At times, HCWs may say that they are familiar with particular needs because they want to be hired, yet they may actually be completely unprepared. According to one worker:

Knowing what you are getting yourself into. Just knowing. And give us information on how we can get training. And if you are caring for a paraplegic, is there a place where you can go and get training. And even if they don't provide it themselves, somewhere where somebody could go to know. So someone isn't going into a home and saying "Yes, I know how to do it" just because they want the job and then something happens and then... It would be better like when you are filling out that information and the questionnaire and you come to your volunteer hours before you get put on - you know, at that time people should give you information on how you can get into different classes and training, AIDS awareness, and different things like that. Because you are dealing with people with different problems. And everybody is different. You know, how do you deal with a blind person. Remember to put things back in the place that you picked it up from - and just different things that you need to know in dealing and working with different people.

Analysis of IHSS Data

CMIPS

The PA provided NIOSH a dataset which included select variables from CMIPS for all those receiving IHSS services in Alameda County. This dataset included basic information about the limitations in mobility of the consumers in Alameda County and the types of tasks for which the social workers felt the consumers needed major assistance. The results of our analysis of this database were consistent with the information we obtained through the focus groups and interviews regarding the importance of housekeeping tasks in addition to personal care and patient lifting tasks. Of the more than 9500 consumers in the Alameda County database, 4% were classified as blind or deaf, 11% were “wheelchair bound,” 2% were “bed-bound,” 11% had a mental disability, while the majority (68%) did not have any disability. Those who are wheelchair users or are bed-bound were approved for an average of 45-50 hours of HCW services per week, while the others averaged 25-30 hours. The IHSS uses a 5-point scale to classify the degree of assistance a consumer needs for each major task category. We classified those given a score of 4 (“needs lots of help”) or 5 (“can not function without help”) as needing major assistance with a task. Most consumers were classified as needing major assistance with laundry (98%), housekeeping (98%), shopping (91%), and meal preparation (78%). Fewer needed major assistance with tasks requiring more physical exertion related to personal care, such as bathing (45%), dressing (30%), and transfers within the house (17%).

Workers’ Compensation Data

Between January and October 2001, there were only 17 workers’ compensation claims. Table 2 shows the narrative description of 15 of these injuries (2 were incomplete) and demonstrates the types and causes of HCW activities resulting in compensation claims.

Site Visit

During the evaluation of HCWs in Alameda County, one in-home site visit was conducted. We visited the home of a middle-aged male who had been receiving home care services from IHSS for a long time. He had a deteriorating physical condition which required extensive use of a wheel chair for mobility in and out of his apartment. He was at the time receiving the maximum number of hours available from the County, which was distributed among up to three home care providers. We had no specific agenda regarding the visit – our intent was merely to observe and ask questions. We arrived early in the morning to observe his daily wake up, personal grooming, and breakfast routine. The subject’s apartment was equipped with two ceiling-mounted lift track systems. One was used to hoist him out of bed and place him into a wheel chair. He was then wheeled into his bathroom where another similar system was used to transfer him from the chair to toilet and tub. The morning routine consisted of toilet use, shower and shave, shampoo and blow dry, dressing, and breakfast. These services were provided by one HCW. After these morning activities, he was ready to work on his computer, which he used to conduct a part time business.

The apartment was small, but was laid out well for a wheel chair. Doorways were wide and often-used items such as books, appliances in the kitchen, and light switches were accessible from a sitting position. Wooden 12-inch rulers were hung from the light switch toggle mechanisms so that pulling would turn the switch off and pushing would turn it on. The kitchen cabinets were open with bungee cords stretched across the openings to secure items while enabling easy access. Many of the accommodations made to the apartment were simple and clever. It became apparent though, that a structured evaluation of the dwelling of a consumer eligible for IHSS hours could reveal shortcomings both in the structure and the equipment and facilities contained therein, and would be useful to the social worker for identifying items or components needed to best accommodate a consumer in a particular environment having a specific type of need.

Training Program

Based upon the information developed through this project, LOHP developed a training curriculum for HCWs designed to share information from the focus groups and interviews, solicit additional perspectives on problems and solutions, and enhance HCWs' ability to take leadership roles in developing hazard prevention programs and activities. The training program was conducted in collaboration with the union and the PA. The lesson plan for this program is in Appendix 3. Using this curriculum, a pilot training program was conducted three times (in English, Spanish, and Cantonese) in the spring of 2003. Each of the three workshops had 15 to 20 participants and lasted an entire Saturday. Participants confirmed the results of the focus groups that housekeeping tasks were as important a source of physical stress as personal care tasks. Some of the issues related to future training programs that were raised were: (1) the important role HCWs can play in identifying solutions, (2) the importance of effective communication skills, and (3) the need to develop joint strategies for change between the HCW and the consumers.

DISCUSSION

Based upon discussions with PA staff, consumers, HCWs, union representatives, IHSS staff, and other community based service providers, we found tremendous agreement regarding the safety and health needs for this workforce. Most agreed that protecting the safety and health of the HCW was essential to protecting the health of the consumers and that the current IHSS policies and procedures did not address these concerns. However, there was some disagreement regarding how best to accomplish this, while preserving the ultimate authority of the consumer to determine who they hired and how the homecare services were provided. The structure of the program creates some ambiguity as to who is ultimately responsible for protecting the health and safety of the HCWs. Although the Memorandum of Understanding between the PA for IHSS in Alameda County and SEIU Local 616 states that

no provider shall be required to work in any situation which could threaten his/her health and safety, the consumer is ultimately responsible for the provision of a safe and healthy work environment.

Since the California Occupational Safety and Health Administration (OSHA) does not have jurisdiction over HCWs because their workplace is a private home, it is critical that consumers, HCWs, County staff, including IHSS social workers, the PA, and the Union work together to address health and safety issues creatively. It is imperative that IHSS consumers and HCWs collaborate to develop a health and safety educational program that respects the consumers' independence and autonomy, yet ensures safe working conditions.

Our evaluation highlighted several important findings that could guide the content and direction of a safety and health program.

1) HCWs described several personal care activities which can be associated with significant risk of injury. These include lifting and transferring the consumer, bathing activities, dressing activities, and pushing/pulling wheelchairs. Ergonomics, the discipline devoted to matching the demands of tasks and activities to the capabilities and limitations of people, has traditionally been applied to the workplace to design machines and tools for workers, improve productivity, identify injury risk, and reduce compensation losses due to worker injuries. In recent years, ergonomics research and product development has been directed to work tasks that have long been associated with back strain and musculoskeletal disorders, namely the work performed in hospitals and nursing homes and by HCWs.⁶ Most of the research and product development has addressed lifting and transferring of patients. Researchers at the Veteran's Administration in Tampa, Florida, have determined that no patient handling task can be performed safely without some type of physical or mechanical assist.⁷ They have produced guidelines that specify what procedures and/or equipment are recommended based on the dependency status of the individual and the type of transfer being performed.

The types of mechanical assists available range from complex such as ceiling track lifting and conveyor systems to simple such as gait belts to assist in grasping and maneuvering a patient, slip sheets, rollers for transferring and repositioning patients in bed, and transfer boards and pivot discs for helping patients transfer out of a bed. Some hospitals and nursing homes have “zero lift” policies that prohibit the manual lifting and/or transferring of patients who need assistance in performing necessary activities of daily living.

Practical solutions have also been provided by the Federal government. Recently, OSHA produced a document entitled, *Ergonomics for the Prevention of Musculoskeletal Disorders: Guidelines for Nursing Homes*.⁸ This document provides guidance for identifying problems and implementing solutions for lifting, transferring, and repositioning of patients. The guidelines also offer assistance in performing other tasks found in nursing homes such as doing laundry, cleaning, working in the kitchen, and using household hand tools such as knives and cooking utensils.

Many assist devices exist to minimize stresses associated with these activities. HCWs and consumers can also be instructed about ways of doing these activities that would minimize the risk of injury. Most consumers and HCWs face a complex and confusing system that creates economic and bureaucratic barriers to obtaining information about obtaining these devices. The HCW, if adequately trained, can be a source of information and assist the consumer regarding the types and methods of obtaining assist devices. The PA could make information directly available to the consumer on obtaining the less expensive assist devices. For more costly items, it might also be possible for a team of stakeholders, such as consumer leaders, HCW leaders, county staff, IHSS social workers, the union, and the PA to explore innovative ways of obtaining and distributing devices at a lower cost.

2) Housekeeping activities are as physically demanding to the HCWs as personal care

activities and need to be addressed through training and intervention programs. In a recent study entitled “Ergonomic Survey of Household Tasks and Products,” researchers from Cornell University determined that the five most tiring tasks reported by 582 homemakers in central New York were: general cleaning, mopping floors, washing, ironing, and carrying water.⁹ These types of tasks represent a greater risk of injury to HCWs because transfer and lifting tasks are not performed as often when an individual has a dependency level that allows him/her to stay in their own home. Simple solutions to reduce the risk of injury while performing household tasks include use of lightweight mops with long handles that reduce effort and bending over, long handled scrub brushes that reduce reaching while cleaning a bath tub, and hand tools and scrubbers that have rubber coated handles and pivoting heads for improved grip and neutral wrist postures while cleaning.

These stresses could be reduced through educational programs for workers and consumers on how to perform housekeeping activities in a safe manner. Model training curricula already exist through the program developed for HCWs by SEIU local 250 or that developed through this project. It would also be useful to have mechanisms available for consumers to buy low cost and safe (non-hazardous, non-toxic) cleaning equipment and tools. Finally, materials could be developed to assist consumers and HCWs in improving the organization and layout of the homes to minimize stresses. Items used most frequently should be located in the most convenient place for easy retrieval; the heaviest pots and pans should be placed on mid-level shelves and light items on lower levels; cluttered areas should be reorganized to eliminate hazards to tripping and falling such as electrical extension cords and throw rugs. The materials would be most effective if they were developed by a team of the stakeholders, including consumers, HCWs, PA staff, Union staff and County staff, including IHSS social workers. These same stakeholders could help in disseminating and explaining the materials to both consumers and HCWs. An

example of these types of materials is in Appendix 2.

3) According to the focus groups and our key informant interviews, most HCWs have had little formal training and would like more. Workers have limited health information regarding the types of conditions the consumers suffer and the potential health risks associated with their work. Providing paid training time would be preferable and training should occur in a community setting close to the HCWs' homes or work settings. Topics they would like to see covered include the following: safe lifting and other ergonomic issues, protection against blood borne pathogens and other infectious agents, safety issues, CPR and first aid, workers' compensation, a general review of common illnesses and health conditions of the consumers, and expanding the PA's current communication workshop to include communication strategies specific to health and safety issues. Many of these training courses would be most successful if both the HCW and the consumer could receive training together.

4) Conflicts between consumers and workers may pose health risks for both. Training and intervention programs need to be developed which avoid conflicts or provide early intervention before the situation deteriorates. The idea most commonly suggested by many with whom we spoke is the creation of contracts between the consumers and HCWs, which clearly define the specific tasks the HCW will perform and how the work will be organized. A sample "Job Agreement" already exists, but the contract needs to be revised by a team of stakeholders to include health and safety prevention. The contract would be more widely accepted and used if consumer leaders, HCW leaders, county staff, IHSS social workers, the union, and PA could provide assistance in the development of these contracts by providing model language and through educational materials which discuss the advantages of such contracts.

The Alameda County Adult and Aging Services IHSS Homecare Worker Handbook has recently been revised and the final draft is waiting to be

printed by Alameda County Adult and Aging Services. In the future, the handbook's health and safety section could be expanded and distributed to all HCWs in their first language. This would be an effective way to disseminate health and safety information by building on a structure that is already in place.

It would also be helpful to provide early intervention and conflict resolution services when the consumer/HCW pair begin to develop problems. We have heard that Alameda County has recently implemented an IHSS Conflict Resolution Pilot Program to provide this intervention. This pilot program should be evaluated and if safety and health issues are not being raised, the union and PA should provide information to consumers and providers about this program.

5) HCWs have little knowledge regarding workers' compensation and, therefore, current official reporting mechanisms are likely capturing only a minority of the injuries. The rate of cases (17 per 10,000 workers in 10 months) is extraordinarily low. Based on focus group discussion, unless the workers have an acute injury such as a large cut or a fractured limb, it is unlikely that it will be reported as work-related. Collecting information on all work-related injuries, including musculoskeletal pain and discomfort, can be extremely useful in identifying potential important areas for future interventions. Workers need to be informed about their rights under workers' compensation and know how cases should be reported. It would be useful to develop a system of collecting information regarding injuries or musculoskeletal problems that do not get reported to workers' compensation. One method is to work with the new health insurance program providers to collect information about potentially work-related injuries or illnesses that they find during HCW clinical visits.

6) Since each consumer's home environment is different, it is important to develop methods, such as checklists, that will allow IHSS staff, consumers, and HCWs to evaluate the safety of a particular home, given the needs and limitations of the individual

consumer. A self-help assessment guide entitled “Maintaining Seniors Independence Through Home Adaptations,” available from the Canada Mortgage and Housing Corporation., is an example of how an intake checklist could look.¹⁰ It is an interactive web site with “yes” or “no” questions which enables seniors or otherwise physically challenged individuals to evaluate their home environment and configure it to best suit them. This format, coupled with a comprehensive effort to identify the kinds of questions that would best enable an intake social worker to adapt a dwelling to the needs of the consumer would save evaluation time and improve the quality of home care.

CONCLUSIONS

Based on the above discussion, the following general conclusions can be made:

1. Most of the entities involved in this project agree that protecting worker health and safety is essential to protecting the health and well-being of consumers.
2. HCWs are unprepared to protect themselves from the safety and health hazards of their jobs.
3. Not all consumers are skilled at being employers.
4. Many consumers’ homes are not well-equipped for the personal care and house work services they need.
5. Common housekeeping tasks were reported by HCWs to pose as great a risk of injury as lifting, transferring, and attending to other consumers’ physical needs.
6. Based on our findings from this evaluation and information contained in resources such as the OSHA Draft Ergonomics Guidelines for Nursing Home Workers⁷, we conclude that simple tools and assist devices not widely found in consumers’ homes can reduce the risk of injury to HCWs.
7. Poor communication between workers and consumers increases the hazards of the job and reduces the quality of care provided.

8. It is unclear within the independent provider model what entity is responsible for protecting worker safety and health.

RECOMMENDATIONS

A joint union and management committee, with input from important community stakeholders, should develop and implement a comprehensive program for protecting the safety and health of HCWs in Alameda County. This program should clarify and define the specific role of the PA, IHSS, the consumer, and the HCW in providing for safety and health of HCWs. At a minimum, this program should include the following:

1. Training and information for HCWs and consumers on safe procedures for completing the personal and housekeeping tasks routinely performed.
2. Access to health care for injured workers and training on how to report injuries and receive compensation.
3. Provision of equipment (gloves, assist devices, cleaning implements, and supplies) to perform home care services and the means to obtain them.
4. Surveillance systems for tracking the injuries and illnesses experienced by HCWs.
5. Guidance on how to develop a written contract between the consumer and health care workers that defines the tasks and duties of the HCW provider while maintaining the consumers’ right to direct their own care.
6. Conflict mediation services to address problems between consumers and HCWs.
7. Develop simple checklists for workers, consumers, and others to use to evaluate the home environment and prescribe equipment and tools that would better serve the consumer and the HCW.

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Table 1
Homecare Tasks Most Commonly Listed as Causing Pain or Discomfort
By Homecare Worker Focus Groups

Tasks Associated with Consumer Personal Care

- Unassisted consumer lifting and transferring (such as from the bed to a chair)
- Bathing
- Dressing (especially putting on shoes and lifting legs)
- Push/pull/lift wheelchair
- Supporting the consumer while walking or catching them while falling

Tasks Associated with Housekeeping Chores

- Cleaning bathroom (especially the tub)
- Carrying groceries
- Cleaning floors (vacuuming, mopping or hand scrubbing)
- Cleaning kitchen (stove, refrigerator)
- Moving boxes and furniture for cleaning
- Prolonged standing

Table 2
Narrative Descriptions of 15 of 17 Workers' Compensation Injuries
Reported to IHSS
January 1, - October 1, 2001

PROVIDER CLAIMED THAT SHE BROKE HER LEFT HAND'S WRIST WHILE SHE WAS TRYING TO PICK THE RECIPIENT UP FROM THE FLOOR
PROVIDER CLAIMED THAT SHE INJURED HER RIGHT KNEE WHEN SHE FELL DOWN. SHE WAS MOPPING THE KITCHEN FLOOR.
PROVIDER CLAIMED THAT SHE INJURED HER UPPER BACK WHILE SHE WAS PUSHING THE RECIPIENT'S WHEELCHAIR UP THE STAIRS.
PROVIDER CLAIMED THAT WHILE SHE WAS WALKING IN THE BEDROOM SHE STEPPED ON THE RECIPIENT'S CANE, FALLING AND INJURING HER LEFT LEG, HIP AND LOWER BACK.
PROVIDER CLAIMED THAT SHE INJURED HER LOWER BACK WHILE SHE WAS LIFTING, BATHING AND MOVING IN/OUT OF BED THE RECIPIENT. SHE WAS WORKING FROM FEBRUARY 3 TO APRIL 3, 2000. HOWEVER, SHE NEVER REPORTED HER INJURY.
PROVIDER CLAIMED THAT SHE INJURED HER RIGHT KNEE WHILE HELPING THE RECIPIENT TO GET OUT FROM THE BATH-TUB. BOTH LOST THEIR BALANCE AND FELL DOWN. SHE DID NOT REPORT THE ACCIDENT ON TIME BECAUSE THE RECIPIENT DID NOT FIND ANOTHER PROVIDER TO REPLACE HER.
PROVIDER CUT HER RIGHT HAND'S PINKY FINGER WHILE SHE WAS WASHING A GLASS.
PROVIDER CLAIMED THAT SHE WAS SHOPPING FOR GROCERIES FOR RECIPIENT AT SAFEWAY WHEN SHE FELL DOWN (THE FLOOR WAS WET). SHE INJURED HER RIGHT LEG AND HIP.
PROVIDER, WHILE PUTTING AWAY BOXES IN A CLOSET, FELL FROM A LADDER TWISTING HER RIGHT WRIST AND BREAKING IT. SHE REPORTED THIS ACCIDENT TODAY, BUT SHE CLAIMS THAT IT HAPPENED ON NOVEMBER 11, 2000. SHE SAID THAT SHE HAD NOT REPORTED IT BEFORE BECAUSE SHE HAD EXPECTED TO RECUPERATE QUICKLY FROM THIS INJURY.
PROVIDER CLAIMED THAT SHE INJURED HER SHOULDERS AND HIP, WHILE SHE WAS LIFTING THE RECIPIENT, IN ORDER TO CHANGE HIS BED-SORE DRESSINGS.
PHONE CALL FROM RECIPIENT ON BEHALF OF HER SON/PROVIDER THAT HE HAD A SEVERE ASTHMA ATTACK AND AN ALLERGIC REACTION ON HIS HANDS. RECIPIENT CLAIMS HER SON'S MEDICAL PROBLEMS RESULTED FROM THE CHEMICALS IN THE CLEANING PRODUCTS HE WAS USING IN HER HOME. THE PROVIDER HAS NOT CONTACTED ME ABOUT THIS CLAIM.
PROVIDER CLAIMED THAT HE INJURED HIMSELF WHILE HE WAS VACUUMING THE LIVING ROOM.
PROVIDER CLAIMED THAT SHE PULLED A MUSCLE IN HER LOWER BACK WHILE SHE WAS TRYING TO REACH THE UPPER EDGE OF THE MIRROR.
PROVIDER CLAIMED THAT SHE INJURED HER LOWER BACK AND NECK WHILE SHE WAS TAKING THE RECIPIENT TO MEDICAL APPOINTMENT. BOTH WERE RIDING THE PARA TRANSIT BUS WHEN THE ACCIDENT OCCURRED. THE BUS'S OPERATOR MADE AN UNSAFE MANEUVER AND SHE WAS THROWN AGAINST THE EMERGENCY DOOR.
ACCORDING TO THE PROVIDER, WHILE WORKING IN THE KITCHEN HER HEAD BEGAN SPINNING AS A RESULT SHE FELL TWISTING HER LEFT WRIST.

Figure 1
Body Map Diagrams from the four focus groups
"Where do you experience pain at the end of a typical workday?"

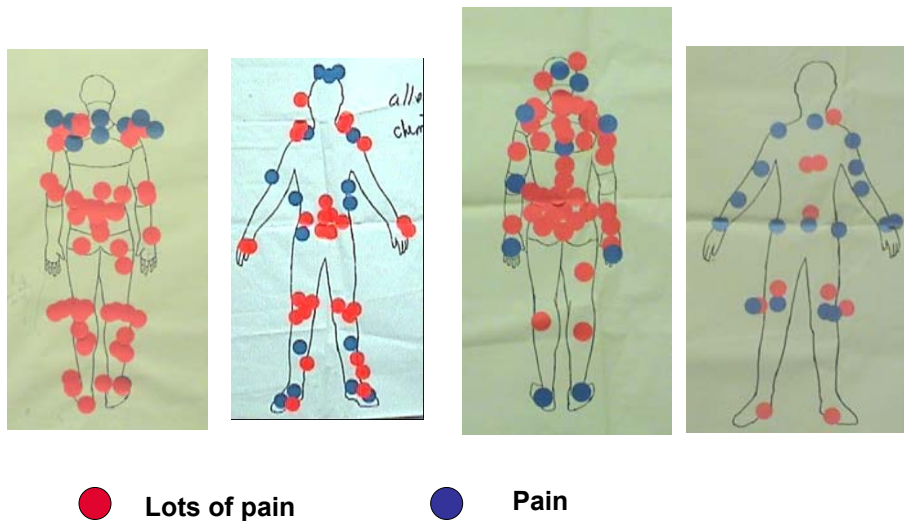


Figure 1: Body Map Diagrams from the four focus groups: "Where do you experience pain at the end of a typical workday?"

Figure 2 Pain Scales

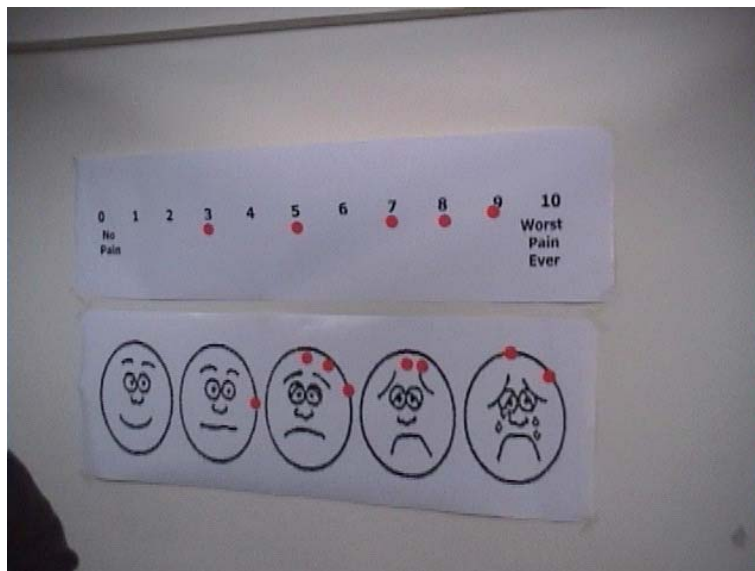


Figure 2: Pain Scales

Appendix 1

**Work tasks listed by each focus group that causes them pain or discomfort
(Numbers following tasks indicate the number of priority dots placed by that task)**

Group 1-English 10 Participants

Lifting from bed to wheel chair	1
Leaning into tub while cleaning.....	4
Showering (washing short consumer).....	2
Lifting - transferring consumer	2
When patient goes limp (unexpectedly) while lifting them.....	1
Mopping floor	1
Putting feet in car	2
Moving from walker to bed	1
Putting legs into bed	0
Moving consumer out of bed	0
Lifting Wheel Chair into car	2
Putting shoes on client	1
Pushing Wheel chair	3
Helping people walk	0
Picking people up.....	2
Lifting people from chairs	1
Turning mattress	0
Moving boxes	1
Moving furniture.....	3
Reaching for something that is high	0
Carrying grocery bags.....	3
Wearing the wrong shoes.....	1
Mopping on hands and knees.....	1
Walking up flights of stairs.....	3
Standing	2
Making bed while they are in it	0
Making a low bed	1

Group 2 English (4 participants)

Bathing - scrubbing the consumer until clean	1
Getting consumer in and out of a chair	0
Lifting consumer up out of bed/couch	2
Preventing falls - catching the consumer	2
Pushing wheel chair	0
Caring for legs (personal care).....	0
Moving to and from toilet	0
Putting shoes on a limp foot	1
Helping consumer with range of motion exercises	1
Going up stairs	1
Mopping (with a heavy janitorial mop)	2
Carrying laundry up and down stairs without a cart (in plastic bags).....	1
Moving boxes/furniture (causes bending)	2
Carrying groceries.....	0
Cleaning toilet/shower	1
Picking things up	0
Standing	0
Washing dishes	1
Cleaning oven (while on knees).....	1

Group 3 Spanish (9 participants)

Vacuuming.....	0
Mopping.....	0
House cleaning (bathroom, stove, refrigerator)	2
Cleaning the bath tub	3
Carrying grocery bags.....	5
Moving furniture in order to clean.....	2
Lifting in and out of wheelchair.....	4
Pushing and pulling the wheelchair (pulling is especially difficult).....	5
Bathing consumer	5
Helping consumer walk, supporting the consumer	5
Dressing the consumer	4

Group 4 Cantonese (12 participants)

Category 1: Patient Care

The following tasks were reported to be associated with various aches and pains while caring for their patients:

• Bathing	
• Getting into wheel chair	1
• Lifting patient from the floor	4
• Supporting patients	3
• Pushing the wheel chair	5
• Massage	2
• Having to stand and help the patient.....	0
• Bathing the patient with back bent.....	1
• Getting in and out of the tub (to support the patients)	2
• Changing diaper, especially when the patient is in bed	1
• Changing bed sheet, with patient in bed	0
• Not having enough room to change sheets	0
• Moving the patient's sleeping position	0
• Moving patients	2

Category 2: Housekeeping Work

The following housekeeping tasks were reported to be associated with various ache and pains:

• Doing laundry (some hand-washed)	0
• Cleaning the floor and tub	5
• Vacuuming.....	5
• Cleaning stove.....	4
• Cleaning shelves and refrigerator	1
• Getting groceries, the rice is heavy.....	1
• Mopping the floor in squatting position.....	3
• Clean the garden and weeding	0

Category 3: Miscellaneous work

The following tasks were reported to be associated with various aches and pains.

• Gardening, watering the plants	0
• Cooking for the entire family (making dumplings, wonton, gyoza, etc.) .	0
• having to stand on your feet all day, and work non-stop	5

Appendix 2

General recommendations for house work and activities in the home

Floors

Select vacuum cleaners that are lightweight to reduce effort

Use an appropriate sized mop for the floor to be cleaned

Use a bucket large enough to submerge the whole mop to make rinsing easy (A bucket with wheels that empties from the bottom would reduce heavy lifting)

Cleaning Tools

Hand tools should have bent handles to maintain straight wrist postures

Handles should be coated or textured for good gripping

Scrubbers should have adjustable length handles and pivoting heads for hard to reach places

Kitchen

Use bent handle knives to maintain neutral postures and consider electric knives to reduce muscular forces while cutting

Use convenient utensils to avoid accidents and reduce muscle forces such as non-skid mixing bowls, under counter jar openers, bagel holders, and palm-control sink brushes

Store items near where they will be used and at a convenient height to avoid unnecessary walking and bending over while retrieving them for use

Wear slip resistant shoes or strap-on traction soles to avoid falling on wet floors

Bathroom

Locate grab bars in shower stalls and bath tub walls to assist in entry and exit of consumers

Install safety treads in showers and bath tubs

Use shower seats and raised toilet seats (preferably with arms) to allow ease of use and reduced effort in assisting consumers

Make sure all electrical outlets have ground fault protection

General

Reduce slip and fall hazards in the home by avoiding area rugs on bare floors and locating electrical and other cords around the perimeter of rooms

Maintain water temperature at a safe level for bathing and cleaning (105-115 °F)

Wear rubber gloves when using cleaning products

Open windows or doors for ventilation when performing household work tasks

Appendix 3 Training Program Syllabus

Developed by the Labor Occupational Health Program, University of California Berkeley. For more information contact Laura Stock (510) 642-5507

Home Care Workers Training Outline March 8, 2003

Time	Activity	Details	Materials
9:00	Sign-in		Sign in sheets refreshments
9:30	Introduction	<ol style="list-style-type: none"> 1. Icebreaker (union) 2. Introductions (LOHP) 3. Overview of objectives and agenda (LOHP) 4. Union presents its expectations of roles of participants (e.g. what the union hopes will come out of this program): “a. To learn: about risks for injuring yourself in homecare; about safe ways of doing things; about how to protect you and your consumer. b. To share Resources for protection; c. To strategize about what you can do when the problem is bigger than you and your consumer; d. To identify what role you can play to make homecare a safe job for all homecare workers.” 	-Flip chart with objectives -agendas
10:00	Body mapping (LOHP)	<ol style="list-style-type: none"> 1. Distribute individual body maps; ask people to mark where they hurt after a day at work. 2. Then each participant posts dots on a big body chart to mark where they hurt. (red for really bad; blue for not so bad) 3. Discussion of common patterns 	- individual body maps -big body map -colored dots
10:20	Ouch activity: Why does it hurt (LOHP)	<ol style="list-style-type: none"> 1. Brainstorm: What are you doing that causes the pain you marked on the flipchart? List responses on board. 2. Group selects one to analyze. 3. Volunteer mimes jobs. 4. Participants place “ouch sticker” on volunteers body where pain might occur and explain what movement/activity is causing the pain. 5. Causes (or risk factors) are listed on 	-flip chart and markers -ouch stickers -props -handout on risk factors

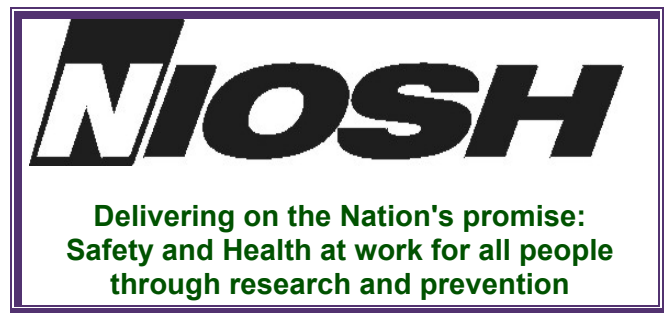
		board. Compare to handout and list of common ergo risk factors.	
10:50	Break		
11:00	Preventing pain (LOHP)	<ol style="list-style-type: none"> Overview of categories of solutions: -10 min. <ol style="list-style-type: none"> equipment - better tools; assist devices; changing how you do the job - new methods, getting help; ppe - gloves, knee pads, etc. Small group activity 20 min <ol style="list-style-type: none"> Give each person 3 dots and ask them to use the dots to vote for the three tasks from the list generated in the earlier activity that they would like the group to focus on in identifying solutions. After everyone has voted, select the top 4 vote getters. Break class into 4 small groups; assign each group one of the 4 risky activities selected and ask people to generate ideas for solutions. Report back. 30 min As each group reports, record ideas under different headings on flip chart (equipment; new method; ppe) 	<ul style="list-style-type: none"> -handout on solutions -flip chart and markers -examples of tools, if possible -handout on getting durable medical equipment
12	Lunch		food
12:45	Making Changes (LOHP)	<ol style="list-style-type: none"> Prioritizing changes <ol style="list-style-type: none"> Lead discussion on how to begin advocating for changes. Describe the following process: 1. look around your worksite and identify hazards using the concepts we discussed earlier (mention possible use of checklists.); 2. Make list of what changes you need; 3. Pick a few of the changes you want to work on first. Consider such issues as what problem is the most hazardous; what is easiest to solve; what will be easiest for your consumer to support, etc. 4. Come up with a plan to make the changes. (segue into next discussion.) How can changes get made? 	<ul style="list-style-type: none"> -flip chart and markers -dots (3 colors)

		<ol style="list-style-type: none"> a. post on flipchart 3 categories: 1. can take care of this myself; 2. my consumer and I need to work together; I need help from union/PA/IHSS. Assign each category a different colored dot. b. Ask people to post dots on solutions listed on flip charts from previous activity according to who needs to make change. <p>5. Sum up by saying that for the rest of the day we will focus on strategies for making changes in these various ways. First, we'll look at communicating effectively with your consumers and next we'll discuss how you can work with the union and other groups when you can't make changes on your own.</p>	
1	Communicating with your consumer (Public Authority, LOHP)	<ol style="list-style-type: none"> 1. Discussion: Who has ever made a change or asked for something on the job? What worked well; what was hard. (10 min) 2. Introduce Role play: Elena and Sara (25 min) <ol style="list-style-type: none"> a. read scenario to group b. break people into small groups c. ask people to develop a role play showing how they would handle the situation. Encourage people to think about communications skills, what info they'd need in advance, who they could call on for help, etc. 3. Report back. (40 min) <ol style="list-style-type: none"> d. Have people present their role plays. Facilitator notes on flip chart strategies used. e. Discuss which strategies worked well and which were less successful. f. review handout on successful communication. 	<ul style="list-style-type: none"> -role play worksheet -communication skills handout -flip chart and markers
2:15	break		refreshments
2:30	Organizational changes (Union)	<ol style="list-style-type: none"> 1. Introduce activity: Now we're going to focus on solutions and strategies that go beyond what an individual can do on her own. Give some examples of when you need to solve problems on a big level. (dark alley; busy street; vacant lot) 	<ul style="list-style-type: none"> -Systems solutions handout -flip chart and markers -felt board

		<p>2. Game: Where does change get made. Ask list of questions and refer to felt board of various places that change happens: union; worker center; worker committees; state capital; federal government; labor/management committee; county (public authority/IHSS)</p> <p>3. Small group activity (20 min)</p> <ul style="list-style-type: none"> a. Break people into 3 groups. Assign each group one of following questions: b. How can the worker center address health and safety issues? c. How can the LMC address this issue? d. How can individual activists work with the union and the LMC to address health and safety? <p>Ask people to come up with as many ideas as they can.</p> <p>4. Report back (45 minutes)</p> <ul style="list-style-type: none"> a. Each group presents ideas to group b. Facilitator lists ideas on flip chart c. General discussion and addition of other ideas from handout and people's experience. 	
3:45	Next steps (union)	1. Discussion of next steps: union presents specific ideas (e.g. creation of health and safety worker committee; follow-up task ideas; next meeting, etc...	
4:15	Evaluation and closing (LOHP)		-Evaluation form

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